

Abstracts

A73

insured population who underwent mastectomy for breast cancer then filled a first prescription for an oral adjuvant hormonal agent (OAHA, defined as tamoxifen or an aromatase inhibitor) within one year after surgery, and had continuous eligibility for pharmacy benefits from six months prior to surgery. Patients were excluded if they had claims coded for distant metastasis or chemotherapy agents specific for advanced cancer. Days covered by OAHA are deduced from dispensed dates and days supplied. Time to nonpersistence (defined as 180 days without OAHA coverage) is estimated using a Kaplan-Meier analysis and the relation assessed between time to nonpersistence and age and history of cytotoxic adjuvant chemotherapy or radiation therapy preceding endocrine therapy. **RESULTS:** A total of 3654 women (age mean 59.8, SD 12.4) were identified who satisfied study criteria, underwent mastectomy between July 1998 and December 2006, and had pharmacy benefits eligibility extending through 2007 or at least 180 days after deduced exhaustion of last OAHA supply. A total of 33.2% had claims consistent with cytotoxic adjuvant chemotherapy and 65% had claims for radiation therapy. Including as right-censored patients still receiving therapy at study end ($n = 1516$) and those lost to follow-up ($n = 969$), the cumulative nonpersistence rate is estimated as 24% at three years. Nonpersistence rates were higher for the youngest and oldest patients, and lower for patients with a preceding history of cytotoxic chemotherapy or radiation therapy. **CONCLUSION:** It is important to increase understanding of the determinants of persistence with cancer therapies administered orally for long time periods.

PCN62

LEUPROLIDE ACETATE PERSISTENCE VARIES BY AGE IN PATIENTS WITH PROSTATE CANCER

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OBJECTIVE: The prevalence of prostate cancer increases with age. Leuprolide acetate is an efficacious therapy in patients with prostate cancer. Therapy persistence is essential for desirable clinical outcomes. **METHODS:** A retrospective analysis was conducted using the Medstat MarketScan database on a commercially and Medicare aged insured population from 2001–2005. The MarketScan database collects medical claims, pharmacy claims, cost, and demographics data. Subjects new to leuprolide acetate (identified by J-Code of J9217) in 2002 and no codes in 2001 were followed for 3 years. Compliance was calculated using the medication possession ratio (MPR = total days supply obtained/days on therapy). Persistence was characterized by the number of fills and the days on therapy (start plus estimated discontinuation date). Subjects were stratified into age-range groups, by those >18 and <51 yr, those >81 yr, and 10-year age ranges in between (51–60, 61–70, 71–80). Survival rate was calculated using Kaplan-Meier survival curves. **RESULTS:** A total of 1541 men with prostate cancer receiving leuprolide acetate were included in the study. The average MPR for all ages was 0.70 (Standard Deviation [SD] = 0.15) and did not change significantly by age. Average months persistence was 15.9 months (SD = 11.8, $N = 1541$) and generally increased with age from 10.6 months (SD = 12.4, $N = 59$) for those 18–50 years; 14.8 months (SD = 13.5, $N = 188$) for those 51–60 years; 12.5 months (SD = 11.2, $n = 302$) for those 61–70 years; 16.7 months (SD = 11.4, $N = 718$) for those 71–80 years; and 19.8 months (SD = 10.4, $N = 274$) for those over 80 years. More than one-third of patients discontinued by six months of therapy. **CONCLUSION:** Leuprolide acetate therapy persistence in-

creased with age. Persistency improvement efforts in younger patients and during the first six months of therapy may result in better outcomes.

PCN63

RACIAL DIFFERENCES IN MEDICATION ADHERENCE TO ADJUVANT HORMONAL THERAPY IN MEDICAID ENROLLED WOMEN WITH PRIMARY BREAST CANCER: A COMPARISON USING TWO ESTIMATION METHODOLOGIES

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OBJECTIVE: To examine differences in medication adherence to adjuvant hormonal therapy between white and black patients with breast cancer using different statistical techniques. The data source: Linked North Carolina Medicaid claims-Tumor Registry data (years 1999–2005). **METHODS:** The study design was a retrospective cohort study of Medicaid enrollees with breast cancer newly starting adjuvant hormonal therapy (tamoxifen or aromatase inhibitor) between years January 2000 to December 2004. Medication adherence [measured as Medication Possession Ratio (MPR)] was assessed using patients' prescription refill records. The Medicaid claims and CCR data were merged using a probabilistic match algorithm. From the linked data, information on patients with ICD-9 codes for primary breast cancer was extracted. **RESULTS:** Black patients had a 7% and 9% lower adherence rate as compared to white patients in the propensity score and regression method respectively. Stratification based on 80% cut-off point for the MPR showed that black patients were 21% less likely to be in the high adherence group. **CONCLUSION:** Results from the propensity score and regression analysis may agree so closely in this study because there was good overlap in the distribution of background characteristics for the white and black women with primary breast cancer enrolled in Medicaid.

PCN64

CLINICAL AND DEMOGRAPHIC PREDICTORS OF QUALITY OF LIFE IN PROSTATE CANCER SURVIVORS

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OBJECTIVE: To determine predictors of quality of life (QoL) in community-dwelling prostate cancer (PC) survivors. **METHODS:** We derived a population-based sample of PC patients diagnosed in 1993–4, 1997–8 and 2001–2, residing in 3 geographically diverse areas of Ontario, from the Ontario Cancer Registry ($n = 2749$, survivors = 1961). Consenting survivors ($n = 851$) were mailed questionnaires, including the Health Utilities Index (HUI 2/3), Patient-Oriented Prostate Utility Scale [PORPUS-P (psychometric) and PORPUS-Ui (utility)], Functional Assessment of Cancer Therapy-Prostate (FACT-P), Prostate Cancer Index (PCI), and a consent form for chart review. We constructed univariate and multivariate regression models to determine the effects of patient-, disease-, system-, and symptom-related variables on QoL. **RESULTS:** A total of 670 patients returned completed questionnaires and 620 charts were reviewed (others lost, destroyed; 597 entered for these analyses). Mean (SD) PORPUS-P score was 71.78 (14.00), mean PORPUS-Ui was 0.86 (0.11), mean HUI3 was 0.78 (0.24), and mean FACT-P was 127.26 (18.40). In univariate analyses with patient-related

variables (age, marital status, education, employment, income, comorbidity), older age, widowhood, lower education, retirement, and comorbidity (Charlson > 2), were associated with lower QoL (all $p < 0.05$). In multivariate analyses, all patient-related variables explained 18–21% of the variance in scores. With the addition of disease-related variables (treatment with radical prostatectomy, radiation, or hormones; metastases, Gleason score at diagnosis), the model explained 21–25% of the variance. Patients currently on hormone treatment had lower PORPUS-Ui and HUI3 scores than patients treated with hormones in the past or never ($p < 0.05$). System-related variables (year and county of diagnosis) contributed little to the explained variance (1–3%). Symptom-related variables (PCI urinary, sexual, bowel function) were the strongest predictors of QOL (explaining 47–70% of the variance). **CONCLUSION:** Symptoms related to PC and its treatment have large effects on the QoL of PC survivors. Although many variables are associated with QoL, only prostate symptoms and comorbidity have independent effects.

PCN65

HEALTH-RELATED QUALITY OF LIFE IN PATIENTS WITH STAGE III OR IV FOLLICULAR LYMPHOMA RECEIVING 90Y-IBRITUMOMAB TIUXETAN FOLLOWING FIRST-LINE CHEMOTHERAPY

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OBJECTIVE: A multicenter phase III trial showed patients with stage III or IV follicular lymphoma who achieved a partial or complete remission after first-line treatment receiving 90Y-ibritumomab tiuxetan had significantly longer PFS time as compared to similar patients receiving no treatment. The objective of this study was to determine the impact of 90Y-ibritumomab tiuxetan on health-related quality of life. **METHODS:** Health-related quality of life was assessed using EORTC QLQ-C30 version 2 and EuroQoL-5D (EQ-5D) questionnaires. These questionnaires were administered at screening, week 14 and every 6 months thereafter and finally at end of follow-up. Descriptive statistics were used to compare scores across treatment groups. The change in scores from baseline was also assessed by gender, age and first-line treatment. Mixed effects model was used to assess the factors that were associated with final scores of Visual Analogue Scale (VAS) of EQ-5D. **RESULTS:** No notable treatment differences were observed in the scores of EORTC QLQ-C30 (all domains) scores across timepoints or changes from baseline. This result was true for all sub-groups. The mean scores for EQ-5D at screening and final visit were 0.83 and 0.84 for 90Y-ibritumomab tiuxetan and 0.84 and 0.83 for control arm. The mean VAS scores at screening and final visit were 77.52 and 77.64 for 90Y-ibritumomab tiuxetan and 76.57 and 78.51 for control arm. An analysis of factors associated with final VAS scores showed that baseline VAS scores affected final VAS scores ($p < 0.0001$). **CONCLUSION:** There appears to be no difference in quality of life for patients on 90Y-ibritumomab tiuxetan as compared to those in control arm as measured by EORTC QLQ C-30 and EQ-5D questionnaires. 90Y-ibritumomab tiuxetan prolongs PFS without impacting the health-related quality of life of patients.

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PCN68

HOUSEHOLD INCOME AS A PREDICTOR OF PSYCHOLOGICAL WELL-BEING AMONG LONG-TERM COLORECTAL CANCER SURVIVORS

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OBJECTIVE: To quantify the impact of disease and its treatment on patient-reported well-being, it is important to consider the patient's economic circumstances. This study explored the relationship between annual household income and health-related psychological well-being among insured, long-term (>five years) colorectal cancer (CRC) survivors with and without permanent intestinal stomas. **METHODS:** This is a secondary analysis of data collected as part of an NCI-funded study of health-related quality of life (HRQOL) among CRC survivors, in which 681 respondents (52% response rate) completed a survey instrument that included the modified City of Hope Quality of Life (mCOH-QOL)–Ostomy questionnaire, SF-36 v2, and socio-demographic items. Of these, 588 subjects provided income data and were included in this analysis. The mCOH-QOL–Ostomy is based on a four-dimension model of HRQOL (physical, psychological, social, and spiritual well-being). For this analysis, the dependent variable was the psychological well-being (PWB) score. Hierarchical linear regression was used to explore the unique contribution of income to the total variance of PWB over and above the model that included the following independent variables: self-reported physical health (SF-36v2 PCS), co-morbidity (Charlson-Deyo), age, sex, race/ethnicity, education, partnered status, and presence of an ostomy. **RESULTS:** After accounting for the proportion of variance in PWB explained by the other independent variables, the additional variance explained by income was significant (R^2 increased from 0.228 to 0.250; $p = 0.006$). When compared to those in the highest household income category (>\$100,000), subjects in the lowest income category (<\$5000) had a clinically meaningful 0.82 point lower PWB score on the 11-point scale. Significant positive predictors of PWB were PCS score, age, and absence of an ostomy. **CONCLUSION:** Although the study design does not allow causal inference, these results demonstrate a significant relationship between income and PWB that merits further consideration when attempting to interpret patient-reported outcomes, particularly HRQOL.

PCN69

QUALITY OF LIFE IMPACT OF HOT FLUSHES IN MEN RECEIVING TREATMENT FOR PROSTATE CANCER

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OBJECTIVE: To provide qualitative data on the men's experience, impact and relative importance of hot flushes as a result of prostate cancer therapies, with an emphasis on gonadotropin-releasing hormone (GnRH) agonists. **METHODS:** A qualitative study applying a non-probabilistic purposive sampling strategy. Participants were over 50 years old with histologically confirmed adenocarcinoma of the prostate, had recently initiated (≤ 6